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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/566,648

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John M. Newsam

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EXAMINER

HANDY, DWAYNE K

ART UNIT

PAPER NUMBER

1773

MAIL DATE

DELIVERY MODE

11/23/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/566,648	Applicant(s) NEWSAM ET AL.	
	Examiner DWAYNE K. HANDY	Art Unit 1773	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 August 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 30-57 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 30-57 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant has canceled claims 1-29 and provided new claims 30-57. Therefore, the previous rejections are moot. New rejections are provided below.

Claim Rejections - 35 USC § 101

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 39 and 55 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 39 provides for the use of “the device of claim 30”, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 39 is also rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim 55 provides for the use of “the device of claim 40”, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 55 is also rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 40, 45, 46, 51-53, 54, 56 and 57 are rejected under 35 U.S.C. 102(b) as being anticipated by Fernwood et al. (4,493,815). Fernwood teaches a test plate assembly. The device is best shown in Figure 1 and described in columns 2-3. The device includes a donor plate having a plurality of wells (upper template - 2) that is mountable to a receptor plate having a plurality of corresponding wells (lower template - 3). During use, a microporous membrane (3) is sandwiched between the templates and

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test material is passed through the membrane (column 4, lines 58-68). The Examiner considers placement of the template upon the base plate (6) as meeting the broad limitation of "sealing bottom openings of the receptor wells" recited in claim 56.

Regarding claims 51-53, the Examiner notes that the terms "slots" and "grooves" may be met by the openings (wells) already cited since the openings on either block would allow a blade to pass through the membrane. Regarding claim 54, Fernwood shows an O-ring layer (4) in Figure 1.

6. Claims 40, 45, 46, 48-53, 54, 56 and 57 are rejected under 35 U.S.C. 102(b) as being anticipated by Picollet-Dahan (7,494,622). Picollet-Dahan teaches a device for measuring the electrical activity of biological elements. The device is best shown in Figures 1-5 and described in column 11. The device includes a donor plate (wafer 121) having a plurality of openings and a receptor plate having a plurality of openings (wafer 123). Picollet-Dahan also includes an upper electrode plate (13) and lower electrode plate (11) with openings and electrodes for analyzing materials. Regarding claim 54, Picollet-Dahan teaches gaskets (4, 5) in column 11.

7. Claim 30 is rejected under 35 U.S.C. 102(b) as being anticipated by Mohan et al. (5,888,830). Mohan teaches an apparatus for multiple chemical reactions. The portion of the device most relevant to claim 30 is the valve block (element 30) shown in Figures 2-6 and described in column 11. The valve block (30) includes a plurality of wells (passages – 50) arranged in an array and a plurality of plate channels (second

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passages – 57) that run parallel to the well rows. Each of the second passages (57) receives a valve stem (55) in the form of a rod. The rod includes a series of transverse holes (56) and is rotatable between two positions to close and open its corresponding row of eight passages in the block. See column 4, lines 21-47.

Inventorship

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. Claims 30-35, 41-44, 47, 51, 52 and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fernwood et al. (4,493,815) in view of Mohan et al.

(5,880,830). Fernwood teaches every element of claims 31-35, 41-44, 47, 51, 52 and 54 except for the rotatable rods to seal the wells of the first and/or second plates.

Mohan teaches an apparatus for multiple chemical reactions. The device is comprised of stackable layers and includes a valve block as one of the layers. The valve block (element 30) is shown in Figures 2-6 and described in column 11. The valve block (30) includes a plurality of wells (passages – 50) arranged in an array and a plurality of plate channels (second passages – 57) that run parallel to the well rows. Each of the second passages (57) receives a valve stem (55) in the form of a rod. The rod includes a series of transverse holes (56) and is rotatable between two positions to close and open its corresponding row of eight passages in the block. See column 4, lines 21-47. It would have been obvious to one of ordinary skill in the art to combine the valve channels and rods from the Mohan with the device of Fernwood. Fernwood teaches a stackable device, but each layer simply includes openings for fluid to flow through without any

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control of the flow through the openings aside from application of vacuum. One would add the valve features from Mohan to allow for the closing of the passages as in Mohan.

11. Claims 30-38, 41-44, 47-52 and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Picollet-Dahan (7,494,622) in view of Mohan et al. (5,880,830).

Picollet-Dahan teaches every element of claims 30-38, 41-44, 47-52 and 54 except for the rotatable rods to seal the wells of the first and/or second plates. Mohan teaches an apparatus for multiple chemical reactions. The device is comprised of stackable layers and includes a valve block as one of the layers. The valve block (element 30) is shown in Figures 2-6 and described in column 11. The valve block (30) includes a plurality of wells (passages – 50) arranged in an array and a plurality of plate channels (second passages – 57) that run parallel to the well rows. Each of the second passages (57) receives a valve stem (55) in the form of a rod. The rod includes a series of transverse holes (56) and is rotatable between two positions to close and open its corresponding row of eight passages in the block. See column 4, lines 21-47. It would have been obvious to one of ordinary skill in the art to combine the valve channels and rods from the Mohan with the device of Picollet-Dahan. Picollet-Dahan teaches a stackable device, but each layer simply includes openings for fluid to flow through without any control of the flow through the openings. One would add the valve features from Mohan to allow for the closing of the passages as in Mohan. Regarding claims 51 and 52, the Examiner notes that the terms “slots” and “grooves” may be met by the openings (wells)

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already cited since the openings on either block would allow a blade to pass through the membrane.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DWAYNE K. HANDY whose telephone number is (571)272-1259. The examiner can normally be reached on M-F 11:00-7:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on (571)-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dwayne K Handy/
Examiner, Art Unit 1773

/Jill Warden/
Supervisory Patent Examiner, Art Unit 1773

November 20, 2010